RUTGERS
School of Health Related Professions

Medical Imaging Sciences

Cardiac Sonography Program

CDXS 4199 Clinical Practice I

**This is a partial syllabus. The full syllabus is available to students upon registration for a course. The syllabus is subject to change.*

Course Description

This course will build upon the experiences from Introduction to Clinical Practice. The course will provide the student with an understanding of the daily operational activities within a cardiovascular diagnostic department. It will provide the student with clinical and practical experience in support of classroom studies.

Through observation and practical application of classroom instruction the student will demonstrate the proper patient care and testing management in the cardiovascular diagnostic department.

Credits/Modes of Instruction

This course consists primarily of clinical practicum, 336 hours. Additionally the student will complete two projects, one in which they will create a detailed report describing the operation and capabilities of an ultrasound imaging system of their choice; the second project the student will prepare a report of one anatomical feature or system within the heart. The student will be awarded 4 credits upon successful completion.

Prerequisites

- Matriculation in the Cardiac Sonography program.
- CDXS 4009 Introduction to Clincal Practice

Instructor

Renee Rapuano, Cardiac Sonography Program Clinical Coordinator (rapuanre@shrp.rutgers.edu)
Site Clinical Instructor as noted by schedule.

Course Goals and Objectives:

Goals

The goal of Clinical Practice I is to provide the student with continued experience in the daily operational activities of a cardiovascular diagnostic department; expand the student's knowledge on the practical application of cardiac sonography and the technical interpretation of echocardiograms; and continue to build cardiac sonography skills and knowledge throughout the semester.

Objectives

The general objective of this course is to provide the student with clinical and practical experience in support of classroom instruction. The student will develop and exhibit the skills necessary to sonographically image the heart and its component structures. The students will be able to:

1. Prepare the room and patient for each examination.
2. Review and/or record the pertinent history and supporting clinical data to facilitate optimum diagnostic results.
3. Attend to patients' safety and comfort.
4. Assist in keeping all necessary records and demonstrate all record keeping and Private Health Information (PHI) confidentiality and security skills.
5. Describe principles of image acquisition, archival, and /or processing for interpretation.
6. Complete with supervision and assistance a comprehensive echocardiogram including image acquisition in all industry standard views; acquire all industry standard color, continuous-wave and pulsed Doppler samples and measurements; acquire industry standard (protocol specific) M-mode & 2D measurements; complete analysis utilizing onboard system software; and assemble preliminary data in a presentable report for physician interpretation.
7. Under the designated clinical preceptor's supervision, complete a comprehensive preliminary report based upon acquired data.
8. Keep a neat, orderly, and properly supplied room and department.
9. Follow standard (universal) precautions.
10. Observe and describe PHI confidentiality & security and HIPAA regulations according to institution specific policy.
11. Follow standard (universal) precautions.
12. Develop initial skills and knowledge to take part in quality assurance activities.

Course Requirements

Requirements for Completion

Requirements	**Weight**
Machine project*	15%
Cross-section anatomy project*	15%
Attendance	20%
Clinical preceptor evaluation**	25%
Clinical Coordinator evaluation	25%
Total	100%

* course requires the student to complete two projects (machine project and cross-section project) – details are noted in the Cardiac Clinical Guidelines manual.

**The student will be graded by the clinical preceptor of the partner institution.

Special Enrollment Requirements
This course requires the appropriate clinical uniform to be worn while in attendance at the clinical affiliate sites. Each clinical affiliate site has its own requirements with which the student must comply (i.e. current immunizations, criminal background check, drug screening panel, mandatory safety training etc). Travel to the clinical site must be arranged by the student.

The Cardiac Sonography program requires the use of a computer and access to the Internet for Rutgers web resources. Rutgers web resources include email, Moodle course management system, and online library resources.

Grade Determination
A grade of 80% has been established as the satisfactory level for all academic and clinic courses in the Cardiac Sonography Program. A final grade below 80% at any time during the students enrollment in the program may subject a student to dismissal. A student who receives two final grades below 80% will automatically be dismissed from the program.

The grade for this course will be Pass or Fail.

Weighted Average of All Requirements	Final Letter Grade	Grade Quality Description
80-100%	P	Pass
Below 80%	F	Fail

No grade will be given until all attendance sheets, daily logs, monthly case evaluation, and monthly tally sheets are handed in. These MUST be handed in on time unless prior approval has been given by either the clinical coordinator or the program director.

*Should the student's final average fall below 80% but above 75% they will be afforded an opportunity to retake a failed mid-term or final examination to achieve a passing final average. This is with the understanding that the highest final average for grading achievable will be 80%. Retake of an examination is at the discretion of the instructor in consultation with the program director taking into consideration the student's standing in other courses (i.e. a student with multiple failed or failing courses may not be afforded the examination retake opportunity).

General Learning Resources

Required Textbook(s)
None

Other Required Learning Resources
Clinical site specific information - from Department staff